



**CALIFORNIA STATE SCIENCE FAIR  
2009 PROJECT SUMMARY**

<b>Name(s)</b> <b>Alaina R. Petlewski</b>	<b>Project Number</b> <b>J2120</b>
<b>Project Title</b> <b>Home Is Where the Heartburn Ends? Home Remedies for Acid Indigestion</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My project was to determine which of eight home remedies tested would reduce the acidity of vinegar, a substitute for stomach acid, the most effectively, and would that remedy work as well or better than a known antacid- Mylanta Ultimate Strength. I believed the baking soda and water would be the most effective.</p> <p><b>Methods/Materials</b> Initial pH readings of 350 ml of white vinegar were taken with a pH meter. The recommended amount of ginger, potato, apple, peppermint, soda crackers, mustard, baking soda &amp; water, milkshake and Mylanta, was added to the vinegar. The pH of the solutions was measured at timed intervals up to one hour.</p> <p><b>Results</b> In both trials, the baking soda and water reduced the acidity of the vinegar the most effectively, even better than the Mylanta Ultimate Strength. However, if you have high blood pressure or are on a salt restricted diet, baking soda is not recommended. In this situation, the remedy to reduce the acidity the most was the milkshake. In the case that you are lactose intolerant and cannot consume baking soda, the raw potato was third most effective in reducing the acidity of the vinegar.</p> <p><b>Conclusions/Discussion</b> My conclusion is that the baking soda and water reduced the acidity of the vinegar the most over the hour long period, working even better than the Mylanta. The next most effective home remedies were the milkshake and then the potato. My hypothesis was proven correct- the baking soda and water reduced the acidity of the vinegar the most effectively. The next most effective home remedy was the milkshake.</p>	
<b>Summary Statement</b> My project determined which of eight home remedies reduced the acidity of vinegar the most effectively, and if the best home remedy would work as well as, or better than Mylanta Ultimate Strength.	
<b>Help Received</b> Mom- helped with spread sheets and graphs, board alignment, and testing	